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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/629,585	07/30/2003	Toshiyuki Kasai	116512	6186

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EXAMINER
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SHENG, TOM V

ART UNIT	PAPER NUMBER
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2629

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/629,585

Applicant(s)

KASAI, TOSHIYUKI

Examiner

Tom V. Sheng

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 21 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-10 and 12-27 is/are rejected.
- 7) ☒ Claim(s) 2 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claim 11 is objected to because of the following informalities:

In line 7 of claim 11, replace "first" with "second"

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 3-10 and 12-27 are rejected under 35 U.S.C. 102(e) as being anticipated by Akimoto et al. (US 2002/0196213 A1; hereinafter Akimoto).

As for device claims 1, 3, 4, 10, 12 and 13 and associated method claims 7, 15, Akimoto teaches an electronic circuit having a circuit section (pixel 5; fig. 6), comprising:

a first transistor (TFT 1);

a capacitor element (storage capacitor 2) that stores an electrical signal supplied by said first transistor as an amount of electrical charge (signal voltage is entered from signal line 7 and fed into capacitor 2 when TFT 1 is turned on; page 3 paragraph 42, 52

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and page 4 paragraph 53);

a second transistor (TFT 9) having a conductive state that is controlled on the basis of the amount of electrical charge stored in said capacitor element (During a first half of one horizontal scanning period, when the TFT 9 turns on, the input/output voltage of the inverter circuit 3, formed by TFT 31 and TFT 32, is reset to  $V_{rst}$ , which is applied to one end of the capacitor 2. The display signal voltage is applied to the other end of the capacitor 2 and a signal charge is formed; paragraph 52); and

an electronic element (OLED 4) to which an electrical current having a current level corresponding to said conductive state is supplied (During the second half of one horizontal scanning period, since TFT 9 is turned off and input voltage at inputs of inverter circuits 3 is  $V_{rst}$  and approximately  $V_{on}$ , the OLEDs 4 are turned on as the written display signal voltages matching a triangular pixel drive voltage; fig. 5 and 6; paragraph 53);

wherein there are provided

a first device (TFT 31) that supplies a first driving voltage (source of TFT 31 is connected to p-channel source line 23; page 3 paragraph 44) to said circuit section (to the Vout point as shown), the first device being a first switching element (TFT 31 is a switch); and

a second device (TFT 32) that supplies a second driving voltage (source of TFT 32 is connected to n-channel source line 24; page 3 paragraph 44) to said circuit section (to the Vout point as shown), the second device being a second switching element (TFT 32 is a switch),

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the first driving voltage and the second driving voltage being supplied to one electrode of the capacitor element (the p-channel source voltage and the n-channel source voltage are supplied to one end of the capacitor 2 as TFT 9 is turned on; fig. 3 paragraphs 48 and 54).

As for claims 5, 6, 8, 9, 14, 16 and 19-27, the OLED 4 is both a current-driven element and an EL element.

As for claims 17, 18, the pixels 5 are used in an image display device (fig. 1; page 3 paragraph 42).

#### ***Allowable Subject Matter***

4. Claims 2, 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. The following is a statement of reasons for the indication of allowable subject matter: none of the prior arts of record teaches the limitations, regarding the first device supplying the first driving voltage in a period in which the electrical signal is supplied to the capacitor element and the second device supplying the second driving voltage in a period in which the amount of electrical current corresponding to the conductive state is supplied to the electronic/electro-optical element, of claims 2 and 11.

#### ***Response to Arguments***

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6. Applicant's arguments with respect to claims 1-27 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom V. Sheng whose telephone number is (571) 272-7684. The examiner can normally be reached on 9:00am - 6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amr Awad can be reached on (571) 272-7764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tom Sheng  
May 5, 2006

AMR A. AWAD  
PRIMARY EXAMINER

